ated; the enclosed space on the metathorax above transversely striated, coarsely so in the middle, and finely so at the sides; beyond the space it is rugose; the wings subhyaline, the nervures black; the coxe and trochanters black. Abdomen: the base of the second joint of the petiole black.

Hab. Santiago.

## Ammophila barbata.

Female. Length 13-13\frac{1}{3} lines. Black: the wings hyaline. their apical margins fuscous beyond the apex of the marginal cell, the fuscous border sharply defined. Head: the face and cheeks with silvery pile, and covered thinly with long black hairs. Thorax: very thinly covered with hoary pubescence; a silvery spot at the posterior margin of the prothorax; the tubercles, two oblique stripes at the sides of the thorax, and the apex of the metathorax silvery; the coxæ, trochanters, and femora beneath covered with changeable silvery pile; the prothorax coarsely transversely striated; the mesothorax with a central longitudinal impressed line, and transversely and coarsely striated, the strice punctured; an elongate small space before the scutellum punctured and without striæ; the scutellum longitudinally punctate-striate; an elongate angular space at the base of the metathorax rugose, on each side of which is an oblique striation. Abdomen black, with a blue tinge, the petiole two-jointed.

Hab. Mexico.

This species closely resembles A. gryphus of N. America, California, and Texas; but the prothorax is shorter, the sculpture of the thorax coarser, and the insect much more pubescent.

[To be continued.]

## BIBLIOGRAPHICAL NOTICES.

Researches in Zoology. Illustrative of the Structure, Habits, and Economy of Animals. By John Blackwall, F.L.S. London: Van Voorst, 1873.

That frequent inquiries should have been made for this book, originally published in 1834, is, we think, sufficient proof, if any were wanting, of its value, and fully justifies Mr. Blackwall in issuing a second edition, "comprising," as he says, "such additions and emendations as subsequent investigations have enabled me to effect." For ourselves we have read through this work attentively, and have been struck with the amount of careful observation it contains, and still more with the wise caution exercised wherever any attempt is made by the author to form conclusions from the facts observed. Take

as an example of this latter feature only the very first essay in the volume, that on the migrations of birds. Then, as regards some moot points of natural history, the student will do well to turn from the pages of his "Wallace" or "Darwin" and compare what they have said with what Blackwall here tells us concerning the notes and instincts of birds in reference to the question so often raised as to their being innate or acquired. The Cuckoo furnishes the subject of a long and interesting article; and when to this we add that other pages are specially devoted to the problems of birds becoming torpid, deserting their young (like the Swallow), and diving, as do many aquatic species, we have, while omitting to mention some shorter essays, said enough to show that the interests of the ornithologist have not been neglected; and turning next (at page 184) to the growth of the Salmon and of the Sewin, we may make the same remark also in reference to the student of fishes.

Our space will only suffice for mentioning that the remaining pages are devoted chiefly to observations upon insects and Spiders. in which last group we encounter Blackwall upon a field of inquiry that, in the pages of this Journal and elsewhere, he may be said to have made peculiarly his own. If any one asks himself, how the gossamer spider manages to float through the air, or how the geometric species contrive to make their nets, he will turn in vain to many a goodly-looking volume of natural science or of comparative anatomy for any thing approaching an intelligible or satisfactory answer. But here, in Mr. Blackwall's volume, the reader will find a solution of much of, and more than, what he is in search after, In many cases, too, both observation and direct experiment have been brought to bear upon the points immediately under investigation; and it is by this double process that our author determines the means by which various animals adhere to or move upon polished vertical surfaces, and whether the poison of spiders is as fatal instantaneously to their prey as it is commonly supposed to be. A valuable paper on the structure and economy of spiders concludes a volume of no less than twenty-five separate essays, out of which we have, for the purpose of this cursory notice, made mention only of a few. To the reader we will only add, get the book itself. As a contribution to our zoological literature of an independent kind Blackwall's pages stand alone-a type the like of which we would, in this age of improved biological speculation, gladly see more of.

On some Remarkable Forms of Animal Life from the Great Deep off the Norwegian Coasts.—I. Partly from the Posthumous Manuscripts of the late Prof. Dr. Michael Sars. By George Ossian Sars. Christiania, 1872. 4to, pp. 82, with six copper plates.

This work is written in English, with the characters of the genera and species in Latin. It contains the descriptions of:—two species of Polyzoa (1. Rhabdoplewa mirabilis, 2. Flustra abyssicola); two Conchifera (1. Yoldia obtusa, 2. Pecchiolia abyssicola); three Cephalophora (1. Dentalium agile, 2. Triopa incisa, 3. Gonieolis typica);